



INSTRUCTION MANUAL

H16/U16 U2 V100/U400 V200/U200 V201  
PROGRAMMING/CLONING

**MAINTENANCE  
SET**

EX-494 PROGRAMMER

To Remove Binary Scan  
BE IN "PROGRAM MODE "F" SCAN

Gerd  
7/27

## FOREWORD

This manual explains in detail how to program each of the available functions in the following transceivers:

IC-H16/IC-U16  
IC-U2  
IC-V100/IC-U400  
IC-V200/IC-U200  
IC-V201

If you have a MASTER transceiver in your Service Center, it is not necessary to open other transceivers in stock when customers require transceiver programming.

## PROGRAMMING NOTE

All parameters except in STEP SCAN (see p. 9) can be cloned from transceivers with new CPUs to those with previously installed CPUs. New CPUs are installed in transceivers starting with the serial numbers below. (IC-U2, IC-V200, IC-U200 and IC-V201 have new CPUs from the beginning but those have no scan function.)

IC-H16 (U.S.A. version) : 8401    IC-V100 : 4101  
IC-H16 (U.K. version) : 1201    IC-U400 : 3601  
IC-U16 (U.S.A. version) : 8501  
IC-U16 (U.K. version) : 1001

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## SECTION 1 CONSTRUCTION OF THE TRANSCEIVERS

The transceivers have two major modes: OPERATING MODE and PROGRAMMING MODE:

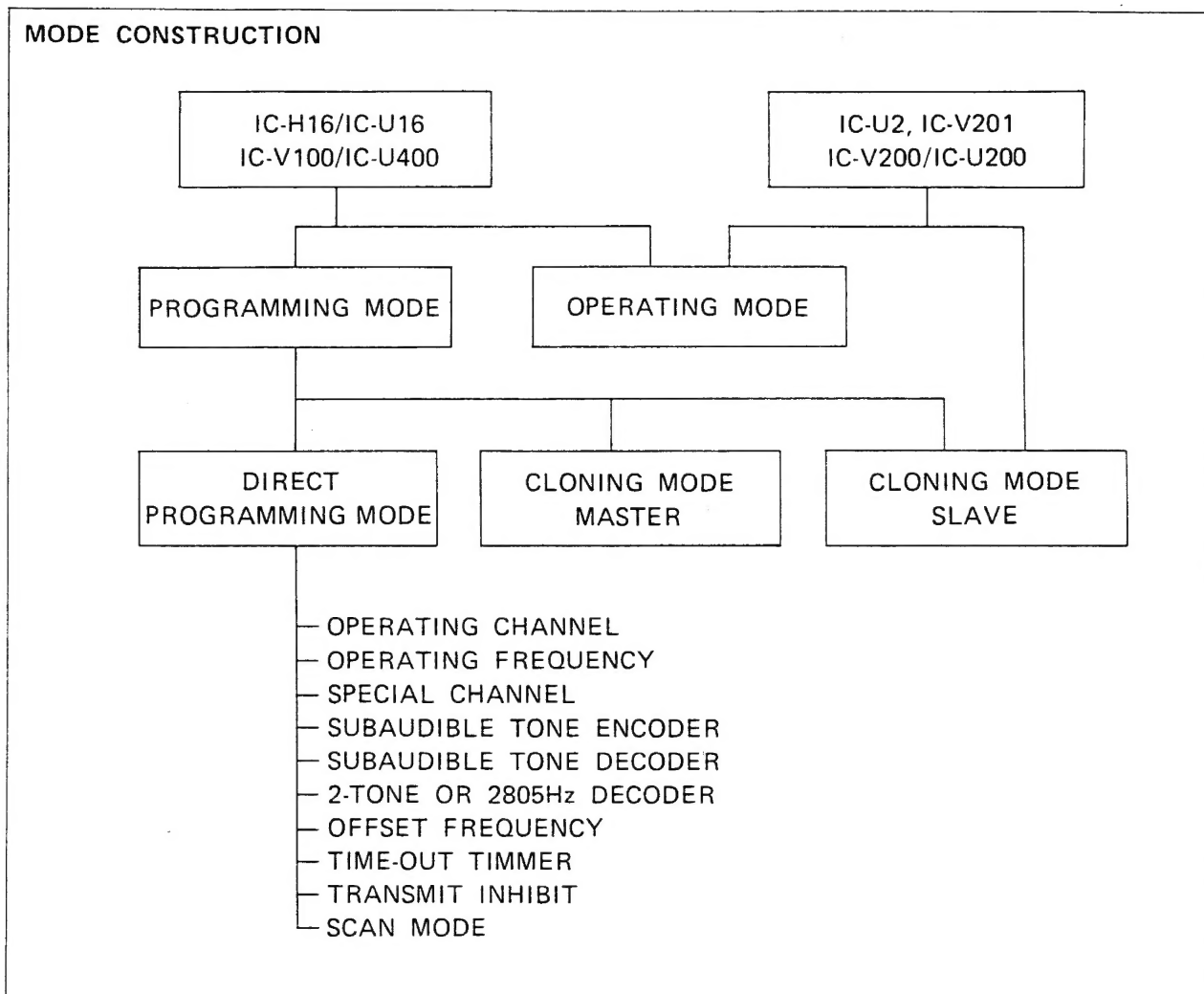
**OPERATING MODE :** This mode is used for normal transmitting and receiving by users.

**PROGRAMMING MODE :** This mode is used for programming the parameters of each channel such as frequency, offset frequency, subaudible tone numbers, etc., via by the DIRECT PROGRAMMING MODE or ICOM's exclusive CLONING MODE.

**(1) DIRECT PROGRAMMING MODE** All parameters can be directly programmed in PROGRAMMING MODE by using the 10-key board on the transceiver or the EX-494 EXTERNAL KEYBOARD.

**(2) CLONING MODE** Identical parameters in the MASTER transceiver can be programmed into the SLAVE transceiver by the ICOM's exclusive cloning system. This system allows you to instantly transfer programmed information.

• The IC-U2, IC-V200, IC-U200 and IC-V201 have no direct programming mode and cannot be used the MASTER transceiver.



The transceiver you wish to program must be switched from OPERATING MODE to DIRECT PROGRAMMING MODE before any programming can be performed.

The IC-U2, IC-V200, IC-U200 and IC-V201 are programmed only by ICOM's exclusive new cloning system. See SECTION 4 CLONING MODE.

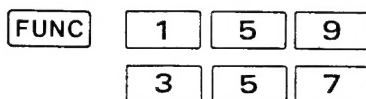
Observe the following instructions to activate DIRECT PROGRAMMING MODE:

## 2 - 1 IC-H16/IC-U16

### (1) PRESET

- 1) Remove the front and rear covers of the transceiver. (Fig. 1 and 2)
- 2) Unplug P1 on the LOGIC UNIT. (Fig. 3)
- 3) Replace the front and rear covers and then turn the transceiver ON.

### (2) SETTING



[1], [5], [9], [3], [5], [7]

- Two dots appear between "ch" and the channel number on the FUNCTION DISPLAY.

- 2) Release the [FUNC] SWITCH. PROGRAMMING MODE is now activated.
- 3) After approximately 60 seconds the transceiver returns to OPERATING MODE automatically if no key has been pushed.
- 4) To return to operating mode, push and hold the [FUNC] SWITCH, and then push the [CLR] KEY. Or, turn the transceiver OFF and ON.

**NOTE:** To prevent additional programming from the user side of the transceiver **DO NOT** forget to re-plug P1 on the LOGIC UNIT.

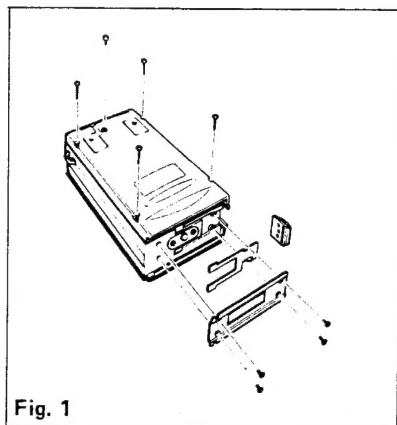


Fig. 1

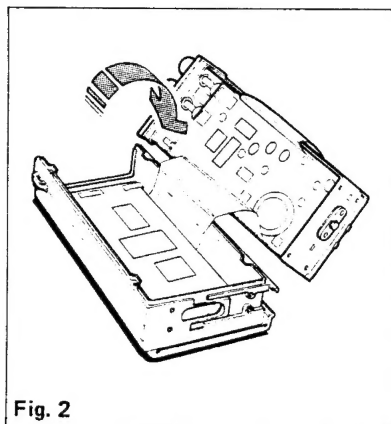


Fig. 2

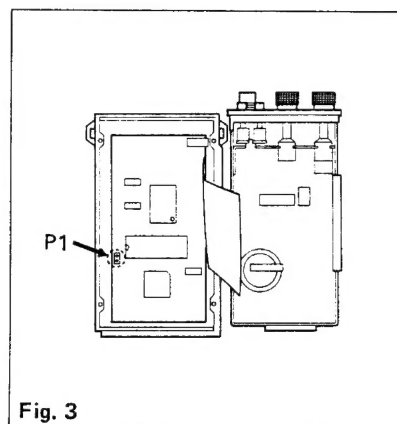


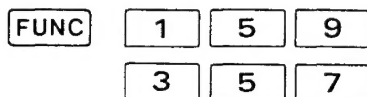
Fig. 3

## (1) Pre-set

- 1) Remove the two hex socket screws from the front panel, and remove the CONTROL HEAD. (Fig. 4)
- 2) Remove the two screws from the back of the CONTROL HEAD, and remove the control head cover. (Fig. 4)
- 3) Plug the connector from the EX-494 EXTERNAL KEYBOARD into J4. (Fig. 5)
- 4) Re-attach the CONTROL HEAD to the main body. (Fig. 6)

## (2) Setting

- 1) Push and hold the [FUNC] SWITCH, and then push the following keys in sequence:



[1], [5], [9], [3], [5], [7]

- Two dots appear between "ch" and the channel number on the FUNCTION DISPLAY.

- 2) Release the [FUNC] SWITCH. PROGRAMMING MODE is now activated.
- 3) To return to operating mode, push and hold the [FUNC] SWITCH, and then push the [CLR] KEY. Or, turn the transceiver OFF and ON.

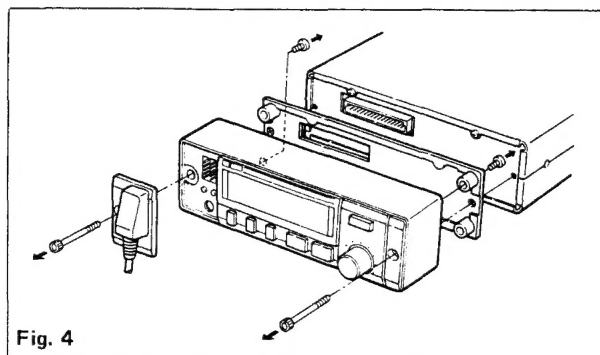


Fig. 4

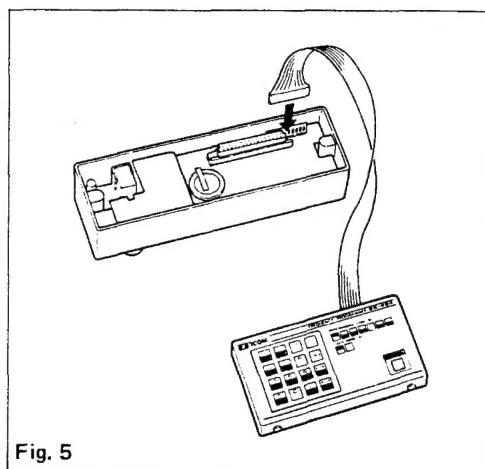


Fig. 5

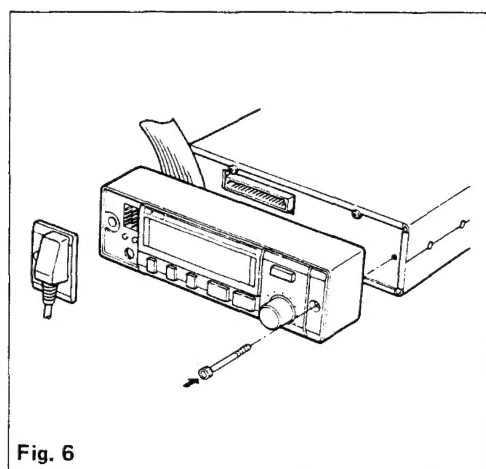


Fig. 6

**3 - 1 SETTING THE PROGRAMMING CHANNEL**

Each parameter must be programmed into an operating channel. Following are the instructions for selecting an operating channel.

- 1) Place the transceiver in DIRECT PROGRAMMING MODE. See SECTION 2.
- 2) Enter the required channel number with 1 or 2 digits by using the 10-key board.
  - "ch :" disappears from the FUNCTION DISPLAY, and then entered channel number appears.
  - Channel numbers "1" ~ "16" only are acceptable for the setting.
  - If the channel number cannot be stored, the channel you wish to enter may be used as special channel. To store the number, cancel the special channel and then enter the number again. Refer to SECTION 3 - 3 SETTING SPECIAL CHANNEL NUMBERS.
- 3) Push the [ENT] KEY. "ch :" appears on the FUNCTION DISPLAY. An operating channel is now stored in the transceiver.
- 4) Pushing the [▼] or [▲] KEY also changes an operating channel number.

**3 - 2 SETTING THE OPERATING FREQUENCY**

Each channel must have an operating frequency programmed into memory before the channel can be used.

**FUNC****5**

- 1) Place the transceiver in DIRECT PROGRAMMING MODE. See SECTION 2.
- 2) Push and hold the [FUNC] SWITCH, and then push the [5] KEY.
  - The previous programmed frequency or "00.00" appears on the FUNCTION DISPLAY.
- 3) Still holding the [FUNC] SWITCH down, enter the desired frequency with 6 digits using the 10-key board.
- 4) Push the [ENT] KEY, and then release the [FUNC] SWITCH.
  - The FUNCTION DISPLAY returns to the current channel number displayed.
- 5) To clear the operating frequency (clear the operating channel), hold the [FUNC] SWITCH down and push the [5], [CLR] and [ENT] KEYS.

### 3 - 3 SETTING SPECIAL CHANNEL NUMBERS

FUNC

7

Special channel numbers from 17 to 99 for storing programmed channels are available. This feature is very useful when operating with other communication systems that use memory channel numbers other than 1 through 16.

These special channel numbers also provide tremendous convenience when communicating with large, multi-frequency systems because different frequencies can be assigned to different memory channels without the need for duplication.

1) Place the transceiver in DIRECT PROGRAMMING MODE.  
See SECTION 2.

2) Push and hold the [FUNC] SWITCH, and then push the [7] KEY.

- "sch:" and the channel number appear on the FUNCTION DISPLAY.

3) Still holding the [FUNC] SWITCH down, enter a desired special channel number with two digits using the 10-key board.

- If the channel you wish to enter is already used, it is cancelled and the transceiver returns to "0" or the previous special channel.

4) Push the [ENT] KEY, then release the [FUNC] SWITCH.

- The FUNCTION DISPLAY returns to current operating channel displayed.

5) To cancel the special channel, hold the [FUNC] SWITCH down and push the [7], [CLR] and [ENT] KEYS.

### 3-4 SETTING THE SUBAUDIBLE TONE ENCODER

**FUNC** **1**

To contact a station equipped with a subaudible tone system or to access some repeaters, it is necessary to transmit a subaudible tone.

1) Place the transceiver in DIRECT PROGRAMMING MODE. See SECTION 2.

2) Push and hold the [FUNC] SWITCH, and then push the [1] KEY.

- The currently programmed tone number or "0" appears on the FUNCTION DISPLAY.

3) Still holding the [FUNC] SWITCH down, enter the desired tone number with 1 or 2 digits using the 10-Key board. Refer to the SUBAUDIBLE TONE NUMBER CHART on the next page.

4) Push the [ENT] KEY, and then release the [FUNC] SWITCH.

- The FUNCTION DISPLAY returns to the current channel number displayed.

5) To cancel the subaudible tone encoder, hold the [FUNC] SWITCH down and push the [1], [CLR] and [ENT] KEYS.

### 3-5 SETTING THE SUBAUDIBLE TONE DECODER

**FUNC** **2**

This section explains how to program the subaudible tone decoder frequency (receive tone number).

1) Place the transceiver in DIRECT PROGRAMMING MODE. See SECTION 2.

2) Push and hold the [FUNC] SWITCH, and then push the [2] KEY.

- The currently programmed tone number or "0" appears on the FUNCTION DISPLAY.

3) Still holding the [FUNC] SWITCH down, enter the desired tone number with 1 or 2 digits using the 10-key board. Refer to the SUBAUDIBLE TONE NUMBER CHART on the next page.

4) Push the [ENT] KEY, and then release the [FUNC] SWITCH.

- The FUNCTION DISPLAY returns to the current channel number displayed.

5) To clear the subaudible tone decoder, hold the [FUNC] SWITCH down and push the [2], [CLR] and [ENT] KEYS.



# SUBAUDIBLE TONE NUMBER CHART

| TONE<br>NUMBER | FREQUENCY<br>(Hz) | TONE<br>NUMBER | FREQUENCY<br>(Hz) | TONE<br>NUMBER | FREQUENCY<br>(Hz) |
|----------------|-------------------|----------------|-------------------|----------------|-------------------|
| 1              | 67.0              | 14             | 110.9             | 27             | 173.8             |
| 2              | 71.9              | 15             | 114.8             | 28             | 179.9             |
| 3              | 74.4              | 16             | 118.8             | 29             | 186.2             |
| 4              | 77.0              | 17             | 123.0             | 30             | 192.8             |
| 5              | 79.7              | 18             | 127.3             | 31             | 203.5             |
| 6              | 82.5              | 19             | 131.8             | 32             | 210.7             |
| 7              | 85.4              | 20             | 136.5             | 33             | 218.1             |
| 8              | 88.5              | 21             | 141.3             | 34             | 225.7             |
| 9              | 91.5              | 22             | 146.2             | 35             | 233.6             |
| 10             | 94.8              | 23             | 151.4             | 36             | 241.8             |
| 11             | 100.0             | 24             | 156.7             | 37             | 250.3             |
| 12             | 103.5             | 25             | 162.2             | ---            | -----             |
| 13             | 107.2             | 26             | 167.9             | ---            | -----             |

## 3 - 6 OPERATING THE 2-TONE OR 2805Hz DECODER

**FUNC** **2** **9** **9**

To operate the UT-26 (IC-V100 or IC-U400) or UT-32 (IC-U200) 2-TONE DECODER UNIT, or the UT-27 or UT-33 2805Hz TONE DECODER UNIT, follow the same procedure as outlined in SECTION 3 - 4 SETTING THE SUBAUDIBLE TONE DECODER.

In place of a tone number, the entered number **should be "99"**.

Refer to UT-26/UT-27 or UT-32/UT-33 INSTRUCTIONS for information on how to program the 2805Hz tone number or 2-Tone decoder frequency.

- The subaudible tone encoder (transmit tone) can be used even when the optional decoder unit is installed.

### 3-7 SETTING THE OFFSET FREQUENCY

**FUNC**

**4**

The transceivers can function in either simplex or semi-duplex mode and can be programmed for each channel.

1) Place the transceiver in DIRECT PROGRAMMING MODE. See SECTION 2.

2) Push and hold the [FUNC] SWITCH, and then push the [4] KEY.

- The currently programmed offset frequency appears, or "00.00" if no offset frequency has been programmed.

3) Still holding the [FUNC] SWITCH down, push the [▲] or [▼] KEY to select either +DUPLEX or -DUPLEX.

- The offset frequency disappears from the FUNCTION DISPLAY, and then "+" or "-" appears on the left side of display.

4) Still holding the [FUNC] SWITCH down, enter the desired offset frequency with five digits using the 10-key board.

- If an offset frequency which is not allowed is keyed in, the display reverts back to the previously programmed offset frequency.

5) Push the [ENT] KEY, then release the [FUNC] SWITCH.

- The FUNCTION DISPLAY returns to the current channel number displayed.

6) To clear the offset frequency, hold down the [FUNC] SWITCH down and push the [4], [CLR] and [ENT] KEYS.

### 3-8 TURNING THE TIME-OUT TIMER ON AND OFF

**FUNC**

**8**

The time-out timer function provides automatic stopping of transmitting after 60 seconds when the [PTT] SWITCH is pushed continuously from the beginning of a transmission.

Once the time-out timer function is set, the function is varied for all channels.

1) Place the transceiver in DIRECT PROGRAMMING MODE. See SECTION 2.

2) Push and hold the [FUNC] SWITCH, and then push the [8] KEY to turn the time-out timer function ON and OFF alternately.

- "▼" appears on the FUNCTION DISPLAY when the time-out timer function is turned ON.

### 3-9 TURNING THE TRANSMIT INHIBIT FUNCTION ON AND OFF

This function allows you to make receive-only channels.

**FUNC**

**9**

1) Place the transceiver in DIRECT PROGRAMMING MODE.  
See SECTION 2.

2) Push and hold the [FUNC] SWITCH, and then push the [9] KEY to turn the transmit inhibit function ON and OFF alternately.

### 3-10 SELECTING THE PRIORITY OR STEP SCAN

IC-H16/IC-U16:

**FUNC**

**SCAN**

IC-V100/IC-U400:

**FUNC**

**LOCK**

The IC-H16, IC-U16, IC-V100 and IC-U400 provide either PRIORITY SCAN or STEP SCAN capability.

#### PRIORITY SCAN:

The priority channel feature allows easy monitoring of your most important channel while still listening for signals on the programmed channels.

- The transceiver returns to the priority channel if you transmit on the non-priority channel while PRIORITY SCAN is activated.

#### STEP SCAN:

Repeatedly scans the all programmed channels in sequence. The scan will stop on a channel when a signal is received.

- The transceiver can transmit on any channel even when STEP SCAN is activated.

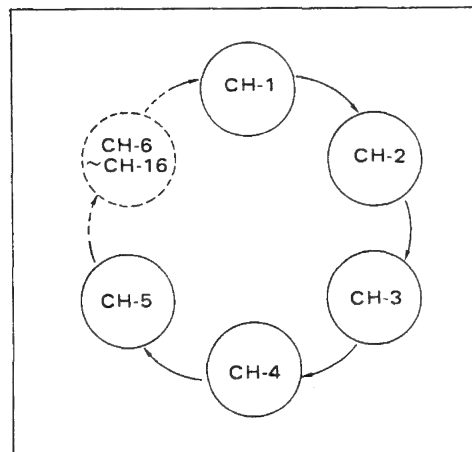
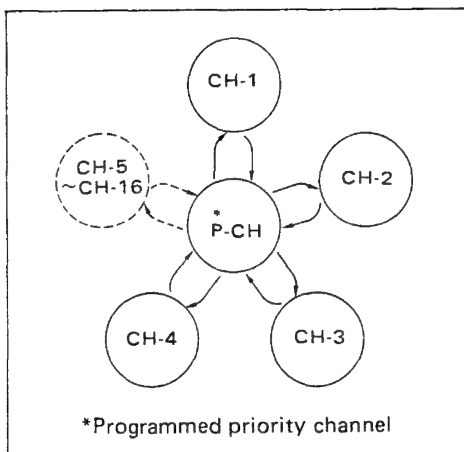
1) Place the transceiver in DIRECT PROGRAMMING MODE.  
See SECTION 2.

2) Push and hold the [FUNC] SWITCH, and then push the [SCAN] KEY (IC-H16, IC-U16) or [LOCK] KEY (IC-V100, IC-U400) to set the scan mode, PRIORITY SCAN or STEP SCAN alternately.

- A priority channel number appears or disappears on the FUNCTION DISPLAY.

Small number appears : PRIORITY SCAN

No small number appear : STEP SCAN



## SECTION 4 CLONING MODE

The IC-U2, IC-V200, IC-U200 and IC-V201 cannot be used as MASTER transceivers.

**NOTE:** When cloning the parameters to the IC-U2 or IC-U200, the required parameters must first be programmed in channels 1 and 2 of the MASTER IC-U16.

- 1) Turn ON MASTER.
- 2) Place MASTER in DIRECT PROGRAMMING MODE.
- 3) Connect PLUG A to MASTER.
- 4) Connect PLUG B to SLAVE.
- 5) Set SLAVE in cloning mode.

**[FUNC]** Power ON

**[SQL]** Power ON

**INTERNAL SWITCH** Power ON

**INTERNAL SWITCH** Power ON

- 6) Data transfer from MASTER.
- 7) Wait for 5 seconds.

- 1) Turn ON power to the MASTER transceiver.
- 2) Place the MASTER transceiver in DIRECT PROGRAMMING MODE. See SECTION 2.
- 3) Connect PLUG A of the cloning cable to the EXTERNAL MICROPHONE JACK or MIC CONNECTOR of the MASTER transceiver.
- 4) Connect PLUG B of the cloning cable to the EXTERNAL MICROPHONE JACK or MIC CONNECTOR of the SLAVE transceiver.
- 5) Set the SLAVE transceiver in cloning mode. Observe the following:

### IC-H16, IC-U16, IC-U2:

Push and hold the [FUNC] SWITCH, and turn ON the SLAVE transceiver. Hold the [FUNC] SWITCH until a BEEP tone is emitted from the speaker.

### IC-V100, IC-U400:

Push and hold the [SQL] SWITCH, and then turn ON the SLAVE transceiver. Hold the [SQL] SWITCH until a BEEP tone is emitted from the speaker.

### IC-V200, IC-U200:

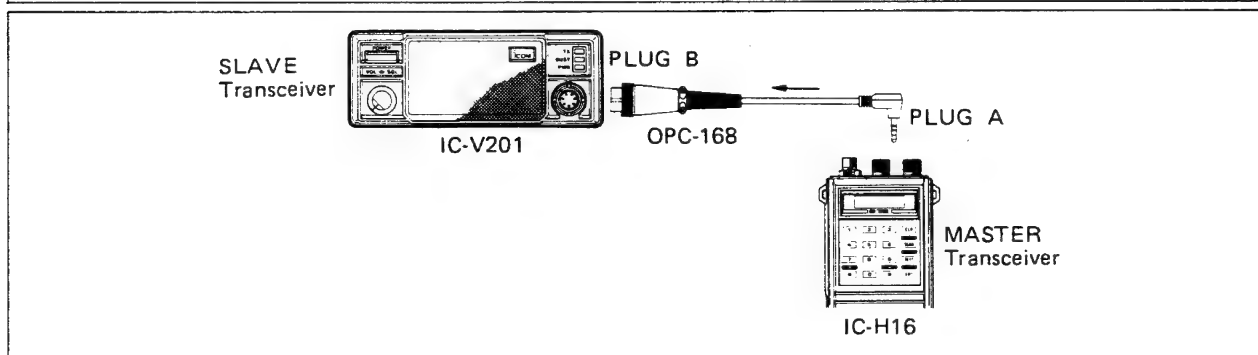
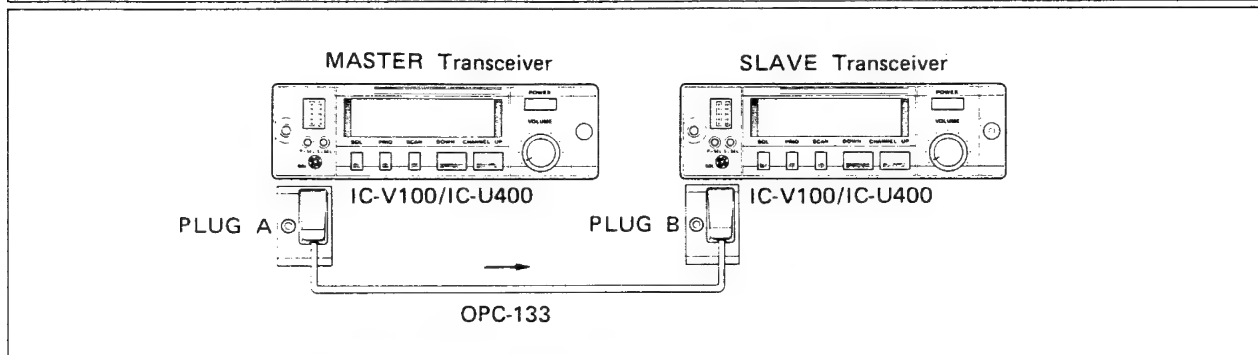
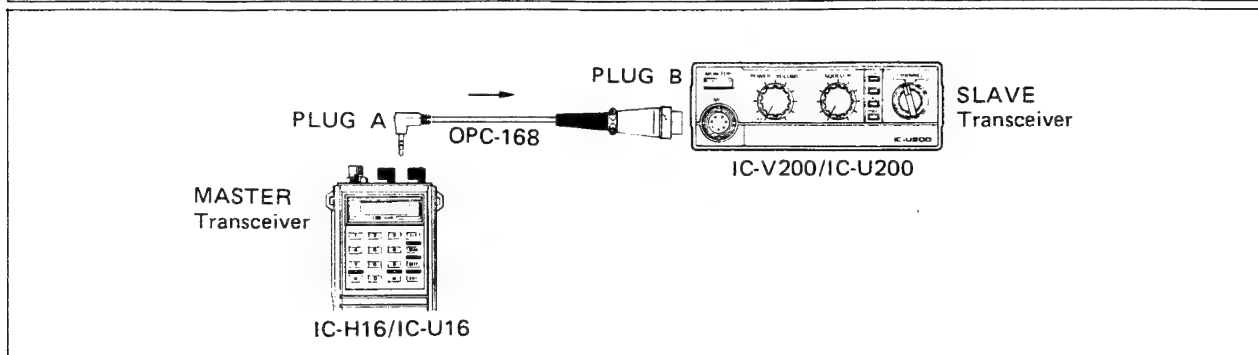
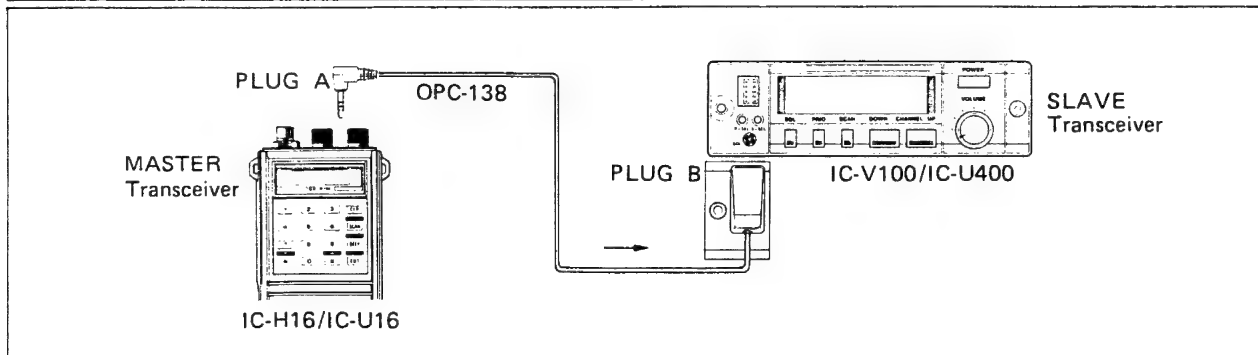
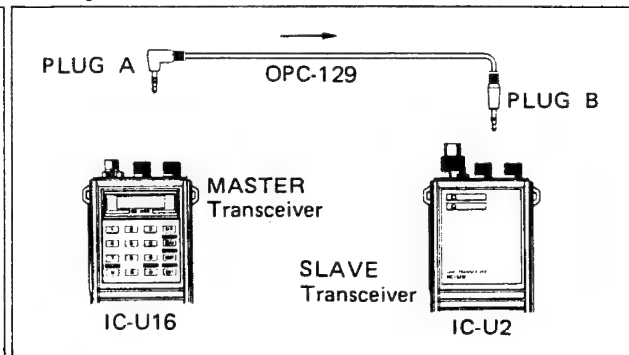
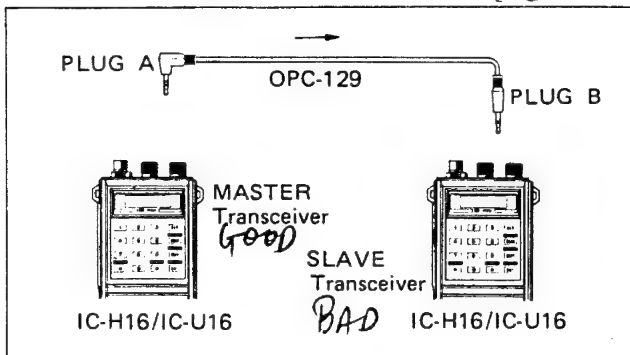
Push and hold the internal switch which is located under the plastic screw on the bottom cover, and then turn ON the transceiver. Hold down the internal switch until the BEEP tone is emitted from the speaker.

### IC-V201:

Push and hold the internal switch (S401) on the LOGIC UNIT which is located under the bottom cover, and then turn ON the IC-V201. Hold down the internal switch until the BEEP tone is emitted from the speaker.

- 6) Push and hold the [FUNC] SWITCH, and then push the [BEEP] KEY (IC-H16, IC-U16) or the [COPY] KEY (IC-V100, IC-U400), of the MASTER transceiver, then release the [FUNC] SWITCH.
- 7) Wait for approximately 5 seconds until the channel number of both the MASTER and SLAVE transceiver appear on the FUNCTION DISPLAY. The cloning procedure is finished now.

# CLONING CONNECTION *Sleeve to Sleeve*



## SECTION 5 PROGRAMMING EXAMPLES

This section shows how to program each parameters in DIRECT SETTING MODE.

### (1) DIRECT PROGRAMMING MODE (p. 2)

IC-H16/IC-U16 : Unplug P1 on the LOGIC UNIT.  
IC-V100/IC-U400 : Connect the EXTERNAL KEYBOARD.

|           |                 |       |                  |       |           |
|-----------|-----------------|-------|------------------|-------|-----------|
|           | (Push and hold) |       |                  |       | (Release) |
| Push keys | FUNC 1 5        | 9 3   | 5 7              | FUNC  |           |
| DISPLAY   | ch: 1           | ch: 1 | ch: 1            | ch: 1 |           |
|           | OPERATING MODE  |       | PROGRAMMING MODE |       |           |

Turning the power OFF and ON returns the transceiver to OPERATING MODE.

### (2) PROGRAMMING CHANNEL (p. 4)

Setting programming channel 16.

|           |       |   |    |        |
|-----------|-------|---|----|--------|
| Push keys |       | 1 | 6  | ENT    |
| DISPLAY   | ch: 1 | 1 | 16 | ch: 16 |

### (3) OPERATING FREQUENCY (p. 4)

Setting the operating frequency at 163.00MHz.

|           |                 |       |       |          |           |
|-----------|-----------------|-------|-------|----------|-----------|
|           | (Push and hold) |       |       |          | (Release) |
| Push Keys | FUNC 5          | 1 6 3 | 0 0 0 | ENT FUNC |           |
| DISPLAY   | ch: 16          | 00.00 | 163   | 163.00   | ch: 16    |

### (4) SPECIAL CHANNEL (p. 5)

Setting special channel 99 using channel 16.

|           |                 |        |         |             |
|-----------|-----------------|--------|---------|-------------|
|           | (Push and hold) |        |         | (Release)   |
| Push keys | FUNC 7          | 9 9    | ENT     | FUNC        |
| DISPLAY   | ch: 16 TONE     | sch: 0 | sch: 99 | ch: 99 TONE |

### (5) SUBAUDIBLE TONE ENCODER (p. 6)

Setting subaudible tone encoder number 8.

|           |                 |     |           |
|-----------|-----------------|-----|-----------|
|           | (Push and hold) |     | (Release) |
| Push keys | FUNC 1          | 8   | ENT FUNC  |
| DISPLAY   | ch: 16          | : 0 | ch: 16    |

## (6) SUBAUDIBLE TONE DECODER (p. 6)

Setting subaudible tone decoder number 37.

|           |        | (Push and hold) |      |             |             | (Release) |
|-----------|--------|-----------------|------|-------------|-------------|-----------|
| Push keys |        | FUNC 2          | 3    | 7           | ENT         | FUNC      |
| DISPLAY   | ch: 15 | : 0             | : 37 | ch: 15 TONE | ch: 15 TONE |           |

When programming the IC-V100 or IC-U400, "TONE" dose not appear.

## (7) OFFSET FREQUENCY (p. 8)

Setting the offset frequency at -600kHz.

|           |             | (Push and hold) |             |     |       | (Release) |
|-----------|-------------|-----------------|-------------|-----|-------|-----------|
| Push keys |             | FUNC 4          | ▼           | 0 0 | 6 0   |           |
| DISPLAY   | ch: 15 TONE | 00:00           | -           | 00  | 00:60 |           |
| Push keys | 0           | ENT             |             |     |       |           |
| DISPLAY   | 00:60       | ch: 15 TONE     | ch: 15 TONE |     |       |           |

## (8) TRANSMIT INHIBIT (p. 9)

Turning the transmit inhibit function ON and OFF.

|           |             | (Push and hold) | (Release)           | (Push and hold) | (Release)            |
|-----------|-------------|-----------------|---------------------|-----------------|----------------------|
| Push keys |             | FUNC 9          | FUNC                | FUNC 9          | FUNC                 |
| DISPLAY   | ch: 15 TONE | ch: 15 TONE     | ch: 15 TONE         | ch: 15 TONE     | ch: 15 TONE          |
|           |             |                 | Transmit inhibit ON |                 | Transmit inhibit OFF |

The FUNCTION DISPLAY dose not show transmit inhibit ON/OFF status.

## (9) TIME-OUT TIMER (p. 8)

Turning the time-out timer ON and OFF.

|           |             | (Push and hold) | (Release)         | (Push and hold) | (Release)          |
|-----------|-------------|-----------------|-------------------|-----------------|--------------------|
| Push keys |             | FUNC 8          | FUNC              | FUNC 8          | FUNC               |
| DISPLAY   | ch: 15 TONE | ch: 15 TONE     | ch: 15 TONE       | ch: 15 TONE     | ch: 15 TONE        |
|           |             |                 | Time-out timer ON |                 | Time-out timer OFF |

## (10) PRIORITY SCAN OR STEP SCAN (p. 9)

Selecting PRIORITY SCAN or STEP SCAN.

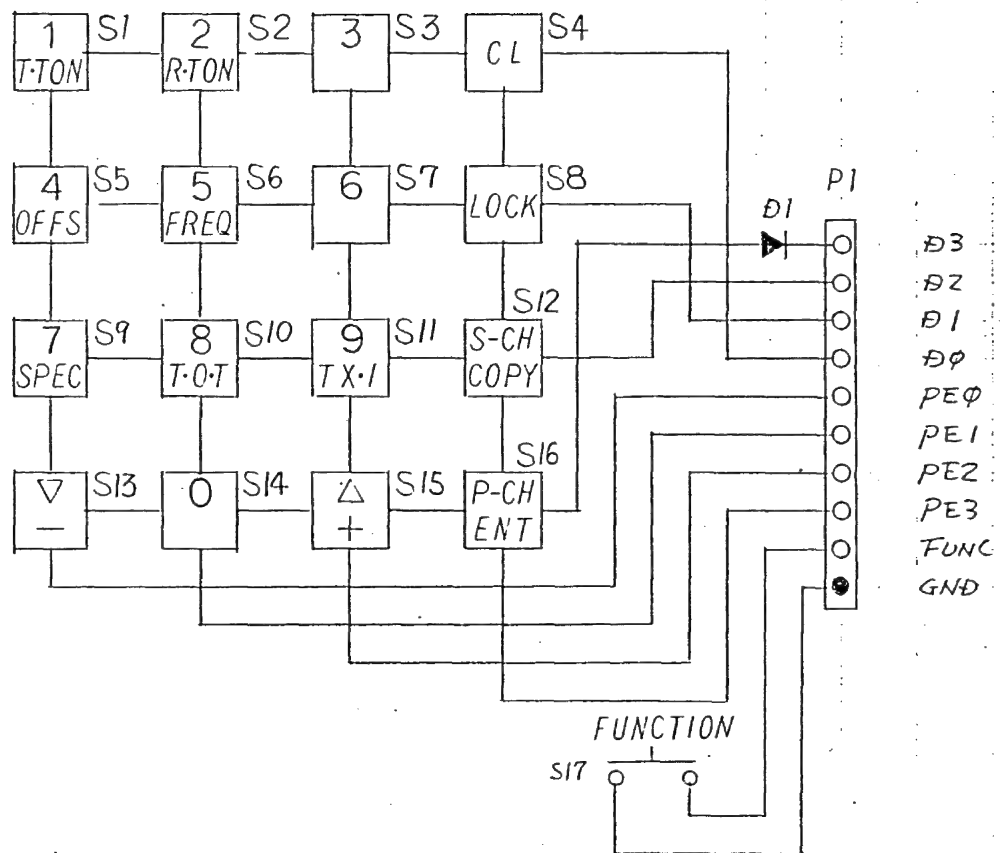
|           |               | (Push and hold) | (Release)   | (Push and hold) | (Release)     |
|-----------|---------------|-----------------|-------------|-----------------|---------------|
| Push keys |               | FUNC SCAN *     | FUNC        | FUNC SCAN *     | FUNC          |
| DISPLAY   | ch: 99 TONE   | ch: 99 TONE     | ch: 99 TONE | ch: 99 TONE     | ch: 99 TONE   |
|           | PRIORITY SCAN |                 | STEP SCAN   |                 | PRIORITY SCAN |

\*When programming the IC-V100 or IC-U400, the [LOCK] KEY is used instead of the [SCAN] KEY.

# **-NOTES-**

## **EX-494 SCHEMATIC**

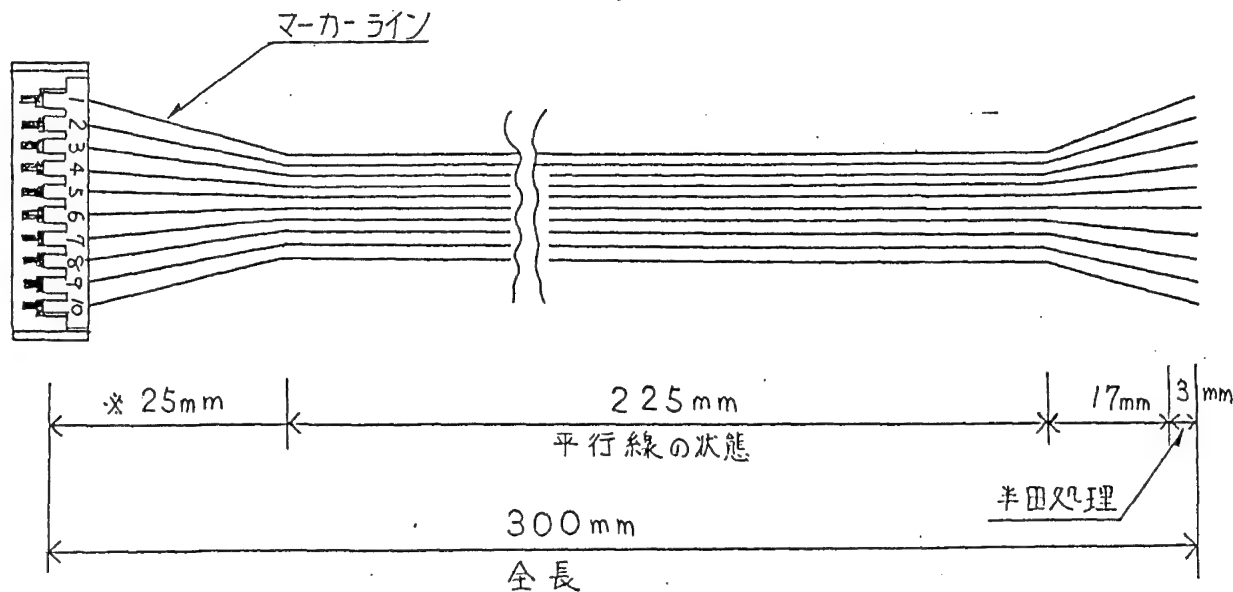




**MASTER**  
Do Not Remove  
From Tech Support Area

|      | A | B  | C                  | D                  | E |
|------|---|----|--------------------|--------------------|---|
| IONS | 1 | .. | DATE 1985 . 7 . 30 | MODEL Ex-494       |   |
|      | 2 | .. | Key Board          |                    |   |
|      | 3 | .. | Schematic Diagram  | DWN.NO. Ex-494-4A1 |   |
|      | 4 | .. | APPD. CLKD.        | DWN.DV.            |   |

記  
事



全長： 300mm  
 線種： TFC-28 フラットケーブル  
 ポート： EHR-10  
 接続： 1番ピン側にマーカーライン  
 ※25mm: 1芯から10芯まで弛みや張りがない長さである事

指定無き公差は ICOM 標準公差の A B C とする

| 訂正 |    | 品名 |    | 品番 |    |
|----|----|----|----|----|----|
| 1  | .. | 品名 | 品番 | 品名 | 品番 |
| 2  | .. | 品名 | 品番 | 品名 | 品番 |
| 3  | .. | 品名 | 品番 | 品名 | 品番 |
| 4  | .. | 品名 | 品番 | 品名 | 品番 |
| 5  | .. | 品名 | 品番 | 品名 | 品番 |

第三角図法

日付

昭和60年9月9日

| 尺度 | 材質 | 処理 |
|----|----|----|
|    |    |    |

EX-494

品名

品番

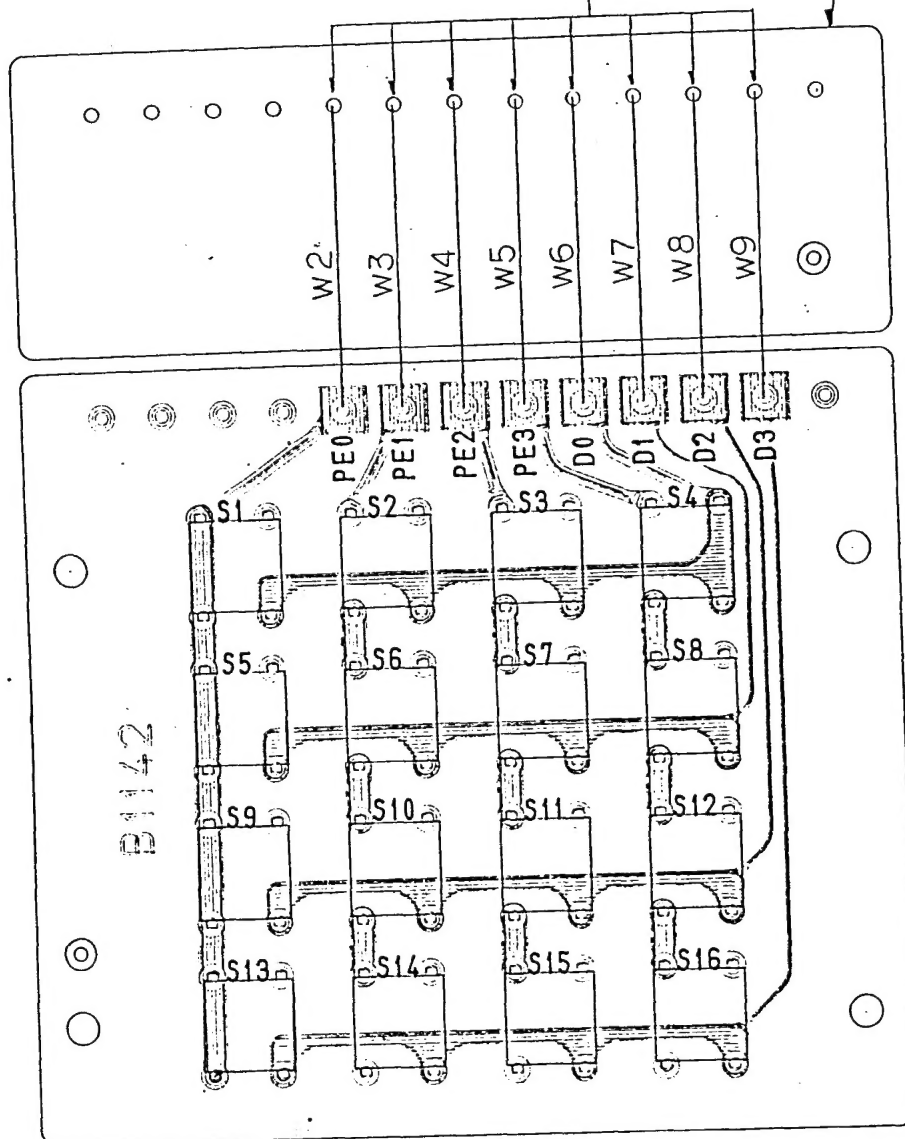
OPC-140

W2~W9はこの様に  
 曲げマトリクス基板に  
 ハンダ付します

スイッチ基板  
 MP7  
 マトリクス基板

ディップ後、この基板は  
 ミシン目から折り不要となり  
 W2~W9は基板上にてカット

カット位置



B-1142

|     |   | A | B | C                | D                   | E |
|-----|---|---|---|------------------|---------------------|---|
| ONS | 1 |   |   | DATE 1985. 9. 25 | MODEL EX-494        |   |
|     | 2 |   |   | キ-ユニット スイッチ基板    |                     |   |
|     | 3 |   |   | 部 品 配 置 図        | DWN.No.EX-494-8B1-1 |   |
|     | 4 |   |   |                  |                     |   |

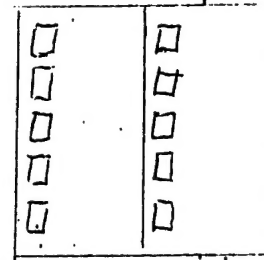
Pin 9 Gnd 2

Pin 10 Not

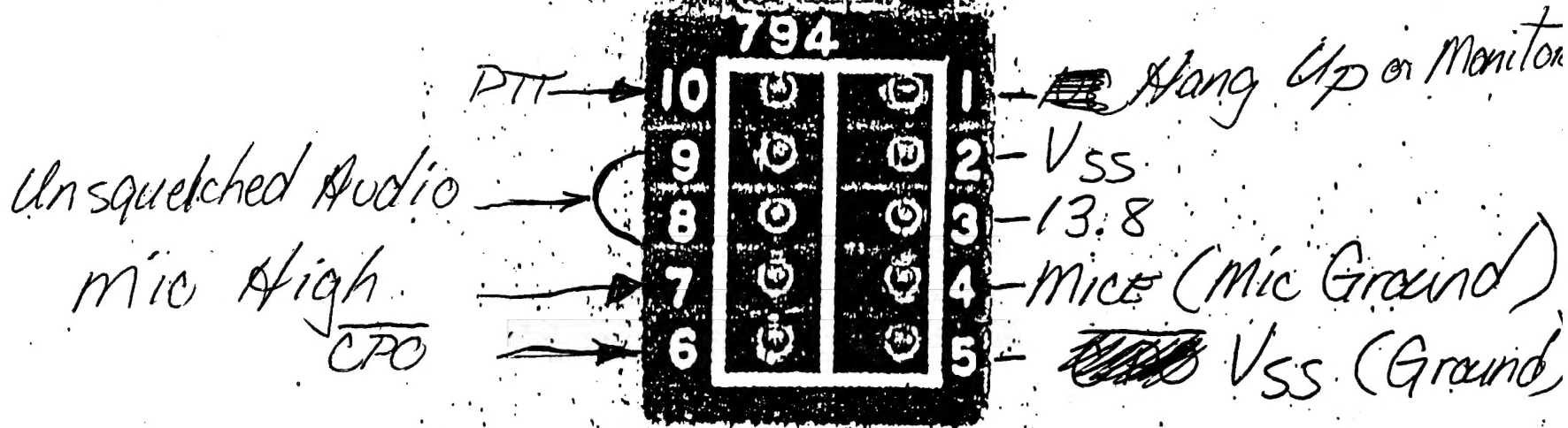
V100 - U400 Mic Connection

Cloning Cable  
PT

Plastic Connectors that will be  
Soldered just this way



**MASTER**  
Do Not Remove  
From Tech Support Area





# ICOM

## SERVICE BULLETIN

**MODEL:** IC-U400 IC-U16  
IC-V100 IC-H16 **SN AFFECTED:** See Below **BULLETIN #** 16 March 87-001  
**DIVISION:** AMATEUR MARINE LAND MOBILE ☒ AVIONICS  
**SUBJECT:** New CPU Programming Instructions

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### Unit and Serial Number for New CPU

IC-U400 from 3601

IC-V100 from 4101

IC-U16 from 8501

IC-H16 from 8401

CPU Change U400, V100, H16, U16

### New CPU Features:

#### 1. Priority or Regular Scan

To disable Priority Scan feature:

- a. Enter Programming Mode
- b. Depress Function button, then depress Scan button.
- c. Decimal point will blink while in non-priority scan.

To enable Priority Scan:

- a. Repeat above procedure.

#### 2. Time-Out Timer Indicator:

If Time-Out Timer is programmed, then a ▼ will appear.

Only indicated in Program Mode.

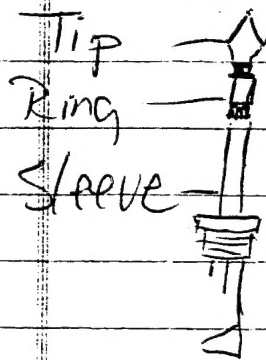
#### 3. H16/U16 only:

- a. Radio will indicate all channels to be scanned; i.e., U400/V100.
- b. Radio will not blink while in Sleep Mode.
- c. Radio will transmit while in the Sleep Mode.
- d. Radio will enter Sleep Mode after one minute of no activity.
- e. Keyboard inhibit diode replaced with jumper plug.

Opc 138

Looking at Front of  
Radio  
V100/U400  
mic jack

Not Used - Tip



Ring

Sleeve

